

REMARKS

Consideration and allowance of the present application is respectfully requested. By this Amendment, claims 1-10 are amended to merely clarify the recited subject matter, new claims 11-20 are added to more fully claim the disclosed invention, and the Specification and Abstract are amended to confirm with U.S. practice.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached Appendix is captioned **“Version with markings to show changes made”**.

In view of the foregoing, the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,

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Enclosure: Appendix

APPENDIX
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

At the top of the first page, just under the title, insert

☒ --This application is the National Phase of International Application PCT/FI99/00813 filed October 1, 1999 which designated the U.S. and that International Application
[X] was [] was not Published under PCT Article 21(2) in English.- -

IN THE CLAIMS:

Please amend claims 1-10 as follows:

1. (Amended) A method of determining a home area for a subscriber terminal in a radio system where the subscriber terminal [comprises] includes measuring means for measuring [the] strengths of signals [it has] received from different base stations and for storing [the] measurement results in a memory, the method comprising: [a step of]
receiving a location updating message from the subscriber terminal; [,]
[characterized in that the method comprises steps of]
transmitting [, after the location updating message has been received,] a command to the subscriber terminal [to transmit the measurement results it has stored in the memory] after the location updating message has been received, wherein the command is to transmit the measurement results stored in the memory of the subscriber terminal; [,]
receiving the measurement results from the subscriber terminal; [,]
identifying the base stations with the greatest signal strengths at least partially based on [the basis of] the measurement results; [,] and
determining the home area of the subscriber terminal such that [it] the home area includes at least one of the identified base stations.

2. (Amended) [A] The method [according to] of claim 1, [characterized by] further comprising preventing the subscriber terminal from setting up communication links via [other] base stations other than those which belong to [its] the subscriber terminal's home area after determining the [a] home area [has been determined] for the subscriber terminal.

3. (Amended) [A] The method [according to] of claim 1, [or 2, characterized in that] wherein [said] the subscriber terminal is a new subscriber terminal and [,] the method further comprises: [also comprising steps of] adding [the] an identity of the subscriber terminal to a register of new subscribers of at least one subscriber network element in the system; [,] and providing [said] the subscriber terminal with free mobility for the duration of the determination of the home area, such that the subscriber terminal operates within an area covered by at least one of the subscriber network elements [which have] having the identity of [said] the subscriber terminal in [their] the register of new subscribers thereof.

4. (Amended) [A] The method [according to] of claim 1 [or 2, characterized in that a] further comprising changing the home area after the home area has been previously determined for [said] the subscriber terminal, [and the home area is changed by means of steps of] the changing including:

adding the identity of the subscriber terminal to the register of new subscribers of at least one subscriber network element in the system; [,]

providing [said] the subscriber terminal with free mobility for the duration of the determination of the home area, such that the subscriber terminal operates [not only] in both the [previously] determined home area and [but also] in an area [that is] covered by at least one of the subscriber network elements [which have] having the identity of [said] the subscriber terminal in [their] the register of new subscribers thereof; [,] and

waiting for a location updating message to be forwarded from the subscriber terminal via at least one of the [a] subscriber network [element which has] elements having the identity of [said] the subscriber terminal in [its] the register of new subscribers thereof.

5. (Amended) A wireless local loop radio system comprising:
a plurality of subscriber terminals [(1, 5) comprising] including:

measuring means for measuring [the] strengths of signals [they have] received from different base stations [(BTS1 - BTS10)] and for storing [the] measurement results in a memory, and

transmitting means for transmitting location updates to other parts of the system; [, and]

a subscriber network element [(DAX1-DAX3, BSC1, BSC2) which communicates] configured to communicate with an exchange [(LE1, LE2, MSC)] and including [which comprises] transmitting means for transmitting telecommunication signals between the subscriber terminals and the exchange via the base stations; [, characterized in that the system comprises]

detecting [detection] means [(4, HLR)] for detecting a location updating message transmitted by a particular subscriber terminal; [,]

command transmitting means [(4, HLR)] for transmitting a command to [said] the particular subscriber terminal [to transmit the measurement results stored in the memory of the subscriber terminal] after [the detection means have detected] detecting [a] the location updating message transmitted by [said] the subscriber terminal, wherein the command is to transmit the measurement results stored in the memory of the subscriber terminal; [,]

receiving means for receiving the measurement results transmitted by [said] the subscriber terminal; [,]

identifying [identification] means [(4, NMS)] for identifying the base stations with the strongest signals at least partially based on [the basis of] the measurement results received from the subscriber terminal; [,] and

determining means [(4, NMS)], responsive to the identification means, for determining a home area for [said] the subscriber terminal such that [said] the home area includes at least one of the identified base stations.

6. (Amended) [A] The radio system [according to] of claim 5, [characterized in] wherein

[that said] the subscriber network element [(DAX1 - DAX3)] communicates with a local exchange [(LE1, LE2)] of [the] a public switched telephone network [in order] to transmit telecommunication signals between the subscriber terminals [(1)] and the local exchange [(LE1, LE2)] via the base stations [(BTS1 - BTS7)], [and that it] wherein the subscriber network element is provided with a register [(2)] of new subscriber terminals, and

[that] wherein the [detection] detection means [(4) detect] detects location updating messages transmitted by one of the [a] subscriber terminals [terminal (1)] the identity of which is stored in the register [(2)] of new subscriber terminals.

7. (Amended) [A] The radio system [according to] of claim 5, [characterized in that said] wherein the subscriber network element [consists of] includes a base station controller [(BSC1, BSC2) of the cellular radio system], [which communicates] the base station controller being configured to communicate with a mobile services switching centre [(MSC) in order] to transmit telecommunication signals between the subscriber terminals and the mobile services switching centre via the base stations [(BTS8 - BTS10)].

8. (Amended) A subscriber network element [(DAX1 - DAX3)] comprising:

transceiving means for setting up a communication link to an exchange for transmitting telecommunication signals between subscriber terminals and the exchange; [, and]

a register [(2)] of new subscriber terminals [, which stores the] being configured to store identities of [the] new subscriber terminals, [characterized in that the subscriber network element comprises]

detecting [detection] means [(4)] for detecting a location updating message containing the subscriber identity stored in the register [(2)] of the new subscriber terminals; [,]

transmitting means [(4) which, after said detection of the location updating message, transmit] for transmitting [to the subscriber terminal which transmitted the location updating message] a command [to transmit the measurement results stored in a memory means of the subscriber terminal] to [the subscriber network element] a particular subscriber terminal which transmitted the location updating message after the detection of the location updating message, wherein the command is to transmit the measurement results stored in the memory of the particular subscriber terminal;

receiving means [(4)] for receiving the measurement results transmitted by [said] the subscriber terminal; [,]

identifying [identification] means [(4)] for identifying the base stations with the strongest signals at least partially based on [the basis of] the measurement results received from the subscriber terminal; [,] and

determining means [(4)], responsive to the identification means, for determining a home area for [said] the subscriber terminal such that [said] the home area includes at least one of the identified base stations.

9. (Amended) A subscriber terminal [(1, 5)] of a radio system, comprising: transceiving [transceiver] means for setting up a communication link via [the] a radio path to other parts of the system; [,]

measuring means for measuring [the] strengths of signals received from different base stations [(BTS1 - BTS10)] and for storing [them] measured results in a memory; [,] and

transmitting means for transmitting a location updating message to the other parts of the system, [characterized in that]

wherein the transceiving [transceiver] means are arranged to transmit the measurement results stored in the memory [means] to the other parts of the system in response to a predetermined command received by the subscriber terminal.

10. (Amended) The [A] subscriber terminal [according to] of claim 9, [characterized in that] wherein the transmitting means are arranged to transmit [said] the measurement results in a short message to the other parts of the system.

Claims 11-20 are newly presented.

11. (Amended) The [A] subscriber terminal [according to] of claim 9, [characterized in that] wherein the transmitting means are arranged to transmit [said] the measurement results in a short message to the other parts of the system.

IN THE ABSTRACT:

Please amend the Abstract as follows:

The invention relates to a method and system of determining a home area for a subscriber terminal in a radio system [where] in which the subscriber terminal includes [comprises] measuring means for measuring [the] signal strengths [of signals it has] received from different base stations and for storing [the] measurement results in a memory[,]. In order for the home area to be determined rapidly and efficiently, the method [comprising a step of] includes receiving a location updating message from the subscriber terminal, [In order that the home area could be determined rapidly and efficiently, the method comprises steps of] transmitting [, after the location updating message has been received,] a command to the subscriber terminal [to transmit the measurement results it has stored in the memory] after the location updating message has been received wherein the command is to transmit the measurement results stored in the memory to the subscriber terminal, receiving the measurement results from the subscriber terminal, identifying the base stations with the greatest signal strengths at least partially based on [the basis of] the measurement results, and determining the home area of the subscriber terminal such that [it] the home area includes at least one of the identified base stations.

[(Figure 1)]